United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets (NPS Form 10-900a).**

1. Name of Property

Historic name Browne's Bridge

Other names/site number 24BE1534/24MA1210

2. Location

street & number Browne's Bridge Fishing Access Site ☐ not for publication

city of town 4 miles North of Glen ☒ vicinity

State Montana code MT county Beaverhead/Madison code 001/057 zip code 59732

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this __x__ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___ national ___ statewide x___local

Signature of certifying official — Date

Title — State or Federal agency and bureau

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official — Date

Title — State or Federal agency and bureau

4. National Park Service Certification

I, hereby, certify that this property is: Signature of the Keeper Date of Action

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:)

5. Classification

Ownership of Property
(Check as many boxes as apply)

	private
X	public - Local
	public - State
	public - Federal
	private

Category of Property
(Check only **one** box)

	building(s)
	district
	site
X	structure
	building(s)
	object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
		buildings
		sites
1		structures
		Objects
		buildings
1	0	**Total**

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

Montana's Historic Steel Truss Bridges

Number of contributing resources previously listed in the National Register

6. Function or Use

Historic Functions
(Enter categories from instructions)

TRANSPORTATION/Road-related (vehicular) =

Bridge

Current Functions
(Enter categories from instructions)

TRANSPORTATION/Road-related (vehicular) =

Bridge

7. Description

Architectural Classification
(Enter categories from instructions)

OTHER: Warren through truss

Materials
(Enter categories from instructions)

foundation: Concrete

walls:

roof:

other: Steel, Wood

Narrative Description

(Describe the historic and current physical appearance of the property. Explain contributing and noncontributing resources if necessary. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, setting, size, and significant features.)

Summary Paragraph

Built in 1915 from a design developed by Montana Highway Department bridge engineer Charles A. Kyle, Browne's Bridge is an excellent example of the standard riveted Warren through truss built in great numbers by the department from 1915 to 1931. Other than the replacement of the east abutment in the early 1990s and the straightening of one of the bottom chords at the same time, there have been no significant changes made to the structure since it was constructed and it continues to exhibit its historic appearance. The bridge crosses the Big Hole River at its original location. Other than the presence of Interstate 15 a few hundred yards to the east of the structure, the setting is still intact and the bridge still carries local traffic across it. The bridge does not have an significant features, but is an excellent example of the type of the standard through truss bridges designed by the highway department and built by the counties during the department's early years.

Narrative Description

Browne's Bridge is located in lower Big Hole valley of southwestern Montana. The bridge crosses the Big Hole River on the Beaverhead-Madison county line about four miles north of the community of Glen (Madison County) and six miles south of Melrose in Silver Bow County, Montana. The bridge is located in a narrow valley on tertiary basin fill that was deposited 2.5 to 65 million years ago. The Pioneer Mountains dominate the landscape to the west, while The Highland Mountains loom to the east. The Ruby Mountains are visible on the horizon to the southeast of the bridge. The Big Hole River in the vicinity of the bridge courses through a narrow canyon delineated by the steep cliffs on the west side of the river. Interstate 15, old US Highway 91, and the Union Pacific Railway line all occupy the canyon in addition to the bridge. The area is now utilized primarily for cattle grazing, hay production, and recreation. The Montana Department of Fish, Wildlife & Parks Browne's Bridge Fishing Access Site is located adjacent to the bridge on the east side of the river.[i]

Browne's Bridge is a single-span, riveted Warren through truss structure. It is 175-feet in length and 16-feet wide with a roadway width of 15-feet. The substructure consists of two simple concrete abutments with concrete wing walls. The east abutment was constructed in the early 1990s and closely matches the original structure. The sloping upper chords of the span consist of laced channel sections with continuous steel plates riveted to the upper chords. The lower chords are laced channel sections. Vertical and diagonals are also laced channel sections. The upper struts are laced angle sections with batten plates and the top lateral braces are angle sections as are the sway braces. Portal braces are also angle sections. The timber deck has running planks and is supported by eight riveted steel I-beam floor beams and five lines of steel I-beam stringers. The deck is flanked by wood curbs and the original angle section guardrails bolted to the superstructure.

Integrity

Other than the periodic replacement of the timber deck and the replacement of the east abutment in 1992, there have been no substantial changes to Browne's Bridge since its construction in 1915-1916. The bridge is the standard riveted steel Warren through truss design developed by Montana State Highway Commission bridge engineers in 1915. This particular design was adapted and utilized by the highway department for Warren through truss bridges, including Browne's Bridge, from 1915 to 1933. All of the structural components and features common to the design are present on the bridge and are unchanged. The bridge retains its distinctive truss configuration, simple angle section guardrails, and the timber deck. Other than the construction of Interstate 15 in 1973, the setting of the bridge site has not significantly changed. The surrounding area is still used for agricultural purposes and the Big Hole River is still defined by cottonwoods and other riverine shrubs. Browne's Bridge retains all its essential elements of design, workmanship, and materials. It appears and functions as it did in 1915 as an important crossing of the Big Hole River in southwestern Montana.

[i] David Alt and Donald W. Hyndman, *Roadside Geology of Montana*, (Missoula: Mountain Press Publishing, 1991), 148.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- [X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B Property is associated with the lives of persons significant in our past.
- [X] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply)

Property is:

- [ ] A owed by a religious institution or used for religious purposes.
- [ ] B removed from its original location.
- [ ] C a birthplace or grave.
- [ ] D a cemetery.
- [ ] E a reconstructed building, object, or structure.
- [ ] F a commemorative property.
- [ ] G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

Engineering

Transportation

Period of Significance

1915-1959

Significant Dates

1915, 1916

Significant Person

(Complete only if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Montana Highway Commission

O. E. Peppard

Period of Significance (justification)

The period of significance for Brownes Bridge is 1915 to 1959. That encompasses the year the bridge was constructed up to the end of the historic period. The bridge still serves in its original function and carries traffic across the Big Hole River.

Criteria Consideratons (explanation, if necessary)

Statement of Significance Summary Paragraph (provide a summary paragraph that includes level of signficance and applicable criteria)

Clearly, Browne's Bridge is eligible for listing on the National Register of Historic Places under Criteria A and C. The bridge is eligible under Criterion A because of its association with the first great period of state-sponsored bridge-building in Montana in the second and third decades of the 20th century. Its construction coincides with the expansion and improvement of Montana's road system in the wake of the creation of the Montana State Highway Commission in 1913. It is associated with the agricultural development of the lower Big Hole River valley and the transition from mining to farming as the lynchpin of the area economy. It is the last through truss remaining in Montana from that first year of state-sponsored bridge-building. It is eligible for the National Register under Criterion C as an excellent example of an intact single-span riveted Warren through truss structure. The Warren truss was the standardized bridge designed and built by the Montana State Highway Commission from 1915 to 1933. All of the features and structural components associated with this bridge type are intact and unchanged. Other than the replacement of the east abutment and the repair of the upstream lower chord, there have been no alterations or other changes made to this structure since its construction in 1915-1916. It is a representative example of the type of bridges designed and built by the State of Montana in the years before World War II.

Narrative Statement of Significance (provide at least **one** paragraph for each area of significance)

Browne's Bridge is an excellent example of a single-span riveted steel Warren through truss bridge. The bridge was built from standardized designs developed by the Montana State Highway Commission (SHC) in 1915 and adapted specifically to this site. Indeed, the bridge is the oldest remaining through truss bridge in Montana that utilized the highway commission's standardized bridge plans. The SHC adopted the Warren truss design because of its strength in relatively short river crossings (less than 200-feet), its durability as a vehicular structure, and because of it was also inexpensive to fabricate and construct. The Warren through trusses were the standard truss bridge designed and built by the Montana SHC from 1915 to 1933. Browne's Bridge is exemplary of the design and representative of the SHC's bridge-building programs from 1915 to 1933. The bridge is eligible for the National Register of Historic Places under Criterion A because of its association with the Commission's first great bridge-building boom from 1915 to 1926 and because it is indicative of the way bridges were built in the Treasure State during that period. They were designed (adapted) by the SHC, which also advertised and awarded the bridge contracts and supervised the construction of the structures. The state and counties shared in the costs of constructing the bridge. The bridge was also an important component of the State's program to improve important Federal Aid highways in the 1910s and 1920s. The bridge was also associated with the agricultural development of the lower Big Hole River valley as it provided access to the Union Pacific Railway stations at Glen and Melrose for farmers and ranchers living on the west side of the river.

Browne's Bridge is also eligible for the National Register of Historic Places under Criterion C because it is an intact example of the type of standardized riveted Warren through truss that the State Highway Commission built in Montana from 1915 to 1933. The highway commission built Warren trusses at river crossings less than 1,000-feet in width. The design was particularly adaptable to different crossing conditions and was easy to build and were affordable both the State and the county governments. The east abutment was replaced and the lower chords straightened in 1992, but there have been no other structural modifications to the bridge and vehicular collisions have not significantly damaged any important structural components. The bridge retains its historic appearance and configuration with all of its original structural components and features intact. The bridge, moreover, still functions as an important crossing of the Big Hole River north of Glen.

Engineering Significance

Beginning in 1915, the Montana State Highway Commission standardized the use of riveted Warren trusses on the state's roads. The Warren truss is easily recognized by the "W" configuration of the diagonal members of the truss. The simplicity and economy of design of the truss made it appealing to American bridge engineers in the early 20th century. The Minneapolis Steel and Machinery Company built the first known Warren through truss (a pin-connected structure) in Montana across the Beaverhead River in Madison County in 1907. By 1915, portable field riveting machines supplanted the need for pin-connections, making a stronger and more reliable vehicular bridge. The SHC standardized a Warren through truss design in 1915 as part of its effort to provide a reliable, durable, and affordable bridge design to Montana's counties. The first Warren truss built under standardized design crossed the Bitterroot River near Florence (now demolished) in Ravalli County. Built in 1915, it provided the model for other Warren through truss bridges constructed in Montana until 1933. Although the Commission and counties built nearly 150 Warren trusses on the state's primary and secondary highways, Browne's Bridge is one of only a few intact examples of the state-designed trusses remaining in Montana and the earliest highway commission-designed bridge remaining in the state.

Developmental history/additional historic context information (if appropriate)

Fred Burr and James Minesinger constructed a toll bridge at the Big Hole River crossing of the Bannack-Deer Lodge Road in late 1862 and early 1863. Joseph Browne, a miner, bought the bridge from the men in 1865. The territorial legislature granted him a charter to maintain the bridge and charge travelers for its use. Within a few years, Browne had acquired about 3,000 acres near the bridge and had developed nearby Browne's Lake for recreational purposes. A post office was located just west of the bridge from 1872 until the early 1880s. Even though most of Montana's counties assumed control of the state's toll facilities by 1892, Browne operated the toll bridge until his death in 1909. Beaverhead and Madison counties assumed joint ownership of the bridge in 1911. By 1915, old age, high water, and a fire had caused both Beaverhead and Madison counties to condemn the old bridge. Residents continued to use it despite the center span's tendency to sway whenever any weight was placed on it. The State Highway Commission's new Bridge Department, under the direction of Charles A. Kyle, completed the plans for a new bridge in July 1915.[2]

On September 23, 1915, the Montana State Highway Commission and Beaverhead and Madison County Commissioners awarded a $8,600 contract for a new bridge to Missoula contractor O. E. Peppard. The contractor began work on the bridge during the second week of October 1915. The *Dillon Examiner* reported that the bridge would "be of sufficient strength to bear the weight of a 20-ton steam roller and will be one of the heaviest bridges in the county, containing about 140,000 pounds of steel." In February 1916, Peppard stopped construction of the bridge because he could not obtain the steel necessary for the superstructure. Steel plants in the east were supplying steel to Great Britain and France in the war against Germany. The contractor told the *Examiner* that "no odd size material is being manufactured and nothing but standard sizes can be had, so the work is at a halt . . . ." Peppard resumed construction of the bridge in February. Peppard completed construction of the new bridge in late March 1916. State Highway Engineer George Metlen visited the bridge in March and stated that it was "one of the bridges that has been built in the county and that it should last for an indefinite length of time." Within weeks of completion of the new bridge, high water washed out the old bridge, which had become a "melancholy reminder of the passing of the old west, and its pioneer men and their works." Browne's Bridge continued to carry traffic from old US Highway 91 to the west side of the Big Hole River until 1990, when high water and ice damaged the bridge, forcing the counties to close it. By 1992, however, Madison County had assigned its responsibility for the bridge to Beaverhead County. Under the direction of Beaverhead County Road Supervisor Richard Miller and Montana Department of Transportation Bridge Maintenance Engineer Jack Walsh, a method was devised to save the old bridge. This included flame straightening the damaged upstream chord and the replacement of the eastern abutment. In 1992, Browne's Bridge was once again opened for traffic.[3]

O. E. Peppard

Obert E. Peppard was one of the most prolific of the Montana-based private bridge contractors operating in the state in the late 19th and early 20th centuries. Born in Lansing, Michigan in December, 1855, Peppard was the son of a bridge builder. In the 1870s, the family relocated to Red Field, Iowa, where Obert learned the trade from his father. In 1881, he set out for Alaska, working his way across the country at a variety of construction jobs. By 1882, he was the supervisor of bridges and buildings for the Northern Pacific Railroad's Missoula Division in Montana. During his tenure with the railroad, Peppard oversaw the construction of several bridges on the railroad's Philipsburg and Bitterroot branch lines.[4]

By 1889, however, Peppard had decided to go into the bridge business for himself. That year, he obtained contracts from Powell County to construct two bridges across the Clark Fork River at Gold Creek and Deer Lodge (both bridges had been demolished by 1982). Over the next three decades, Peppard built bridges in western Montana, including the first Higgins Avenue Bridge in Missoula about 1892 and nearly every vehicular bridge across the Bitterroot and Blackfoot rivers.

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[2] Browne's Bridge is Condemned," *Dillon Examiner*, 7 April 1915; "First Monthly Meeting of Commissioners Held Last Week," *Dillon Examiner*, 11 April 1915; "Commissioners Are to Meet," *Dillon Examiner*, 4 August 1815; State Highway Commission Meeting Minutes, Book 1, 75.

[3] State Highway Commission Meeting Minutes, Book 1, 75, 78, 84; "First Monthly Meeting of Commissioners Held Last Week," *Dillon Examiner*, 11 April 1915; "Commissioners are to Meet," *Dillon Examiner*, 4 August 1915; "Steel Bridge Being Built," *Dillon Examiner*, 13 October 1915; "Work on Bridge Suspended," *Dillon Examiner*, 21 January 1916; "To Inspect Bridge," *Dillon Examiner*, 3 March 1916; "Passing of Browne's Toll Bridge," *Dillon Examiner*, 15 December 1915; "Ancient Toll Bridge Across Big Hole River Washed Out," Unidentified newspaper, c. December, 1915; George R. Metlen, *Report of the Montana State Highway Commission for the Years 1915-1916*, (Helena: State Highway Commission, 1916), 8, 12.

[4] Fredric Quivik, *Historic Bridges in Montana*, (Washington DC: National Park Service, 1982), 39, 41; "O.E. Peppard Passes After a Short Illness," *The Daily Missoulian*, September 26, 1929.

Between 1907 and 1917, when he closed his bridge-building business, Peppard built at least 27 bridges in the Treasure State.[5]

Increasingly strict quality and economic controls by the Montana State Highway Commission and a downturn in the economy of many of the eastern Montana counties where he was most active, compelled Peppard to close his bridge-building business in 1917. Instead, he and his son went into the farm implement business and opened stores in Missoula and Spokane, Washington. Unfortunately, in 1920, Montana and much of the West was struck by a severe economic depression that resulted in the abandonment of 20% of Montana's 55,000 farms. Peppard subsequently closed his farm implement business and lived for the rest of his life on the income derived from his apartment building property in Missoula. When Obert E. Peppard died on September 25, 1929, the *Daily Missoulian* praised him as "one of the best known bridge builders and contractors of western Montana."[6]

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)

See Continuation Sheets

Previous documentation on file (NPS):

____preliminary determination of individual listing (36 CFR 67 has been requested
____previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____recorded by Historic American Buildings Survey #_____
____recorded by Historic American Engineering Record # _____

Primary location of additional data:

____State Historic Preservation Office
__X__Other State agency
____Federal agency
____Local government
____University
____Other
Name of repository: **Montana Department of Transportation**

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property 1
(do not include previously listed resource acreage)

UTM References
(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing		Zone	Easting	Northing
1	12	366900	5044920	3			
2				4			

Verbal Boundary Description (describe the boundaries of the property)

The boundary for Browne's Bridge is a rectangle 175 x 25 feet. The rectangle encompasses the bridge and its approaches on both sides of the Big Hole River. The boundary is centered on the bridge.

[5] Quivik, *Historic Bridges*, 39, 41; "O.E. Peppard Passes."

[6] Quivik, *Historic Bridges*, 39, 41; "O.E. Peppard Passes;" Michael P. Malone, Richard B. Roeder, and William L. Lang, *Montana: A History of Two Centuries*, Rev. ed. (Seattle: University of Washington Press, 1991), 281, 283.

Boundary Justification (explain why the boundaries were selected)

Boundaries for Browne's Bridge are drawn to encompass the single span of the bridge, its immediate approaches and that portion of the Big Hole River spanned by the bridge. The width is increased beyond the measurements of the structure to include the abutments.

11. Form Prepared By

name/title Jon Axline/Historian
organization Montana Department of Transportation date May 13,2009
street & number 2701 Prospect Avenue telephone (406) 444-6258
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e-mail jaxline@mt.gov

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** (7.5 or 15 minute series) indicating the property's location.

  A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Continuation Sheets**

- **Additional items:** (Check with the SHPO or FPO for any additional items)

Photographs:

Submit clear and descriptive black and white photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Browne's Bridge
City or Vicinity: Glen Vicinity
County: Beaverhead and Madison Counties **State:** MT
Photographer: Kristi Hager
Date Photographed: June 2005
Description of Photograph(s) and number: East portal and north profile. Browne's Bridge. View to the west. **1 of 2.**

Name of Property: Browne's Bridge
City or Vicinity: Glen Vicinity
County: Beaverhead and Madison Counties **State:** MT
Photographer: Unknown
Date Photographed: Winter 1916
Description of Photograph(s) and number: West portal. Browne's Bridge. View to the east. **2 of 2.**

Bibliography

Alt, David and Donald W. Hyndman. *Roadside Geology of Montana*. (Missoula: Mountain Press Publishing, 1991).

"Ancient Toll Bridge Across Big Hole River Washed Out." Unidentified newspaper, c. December, 1915

Axline, Jon. *Conveniences Sorely Needed: Montana's Historic Highway Bridges, 1860-1956*. (Helena: Montana Historical Society, 2005).

Bridge Inspection File No. L01320003+01001. Montana Department of Transportation. Helena, Montana.

"Browne's Bridge is Condemned." *Dillon Examiner* (7 April 1915).

"Commissioners Are to Meet." *Dillon Examiner* (4 August 1915).

"First Monthly Meeting of Commissioners Held Last Week." *Dillon Examiner* (11 April 1915).

Malone, Michael P., Richard B. Roeder, and William L. Lang. *Montana: A History of Two Centuries*, Rev. ed. (Seattle: University of Washington Press, 1991).

Metlen, George R. *Report of the Montana State Highway Commission for the Years 1915-1916*. (Helena: State Highway Commission, 1916).

"O.E. Peppard Passes After a Short Illness." *The Daily Missoulian* (September 26, 1929).

"Passing of Browne's Toll Bridge." *Dillon Examiner* (15 December 1915).

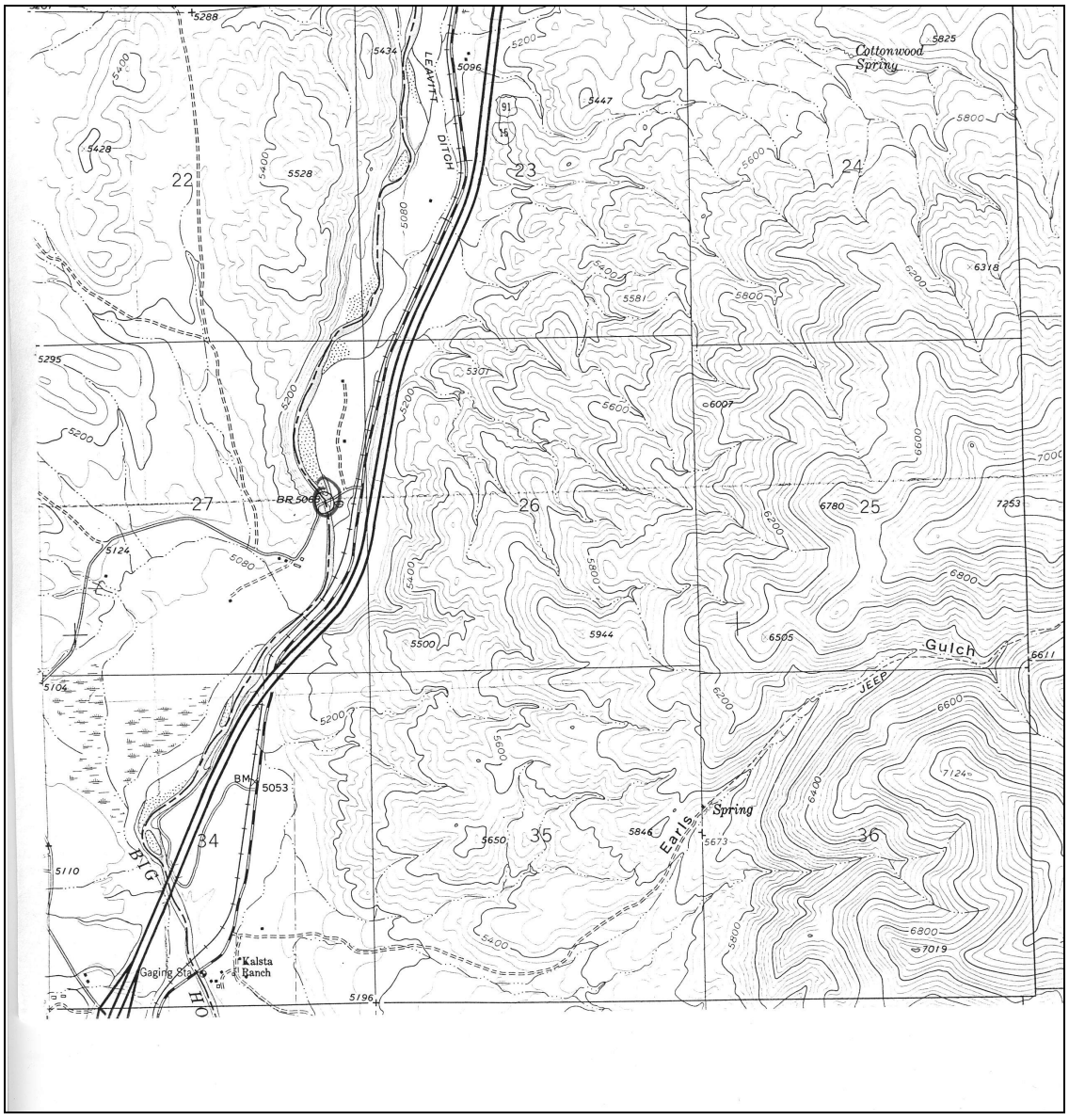
Quivik, Fredric. *Historic Bridges in Montana*. (Washington DC: National Park Service, 1982).

State Highway Commission Meeting Minutes. Book 1 (1913 – 1920). Montana Department of Transportation. Helena, Montana.

"Steel Bridge Being Built." *Dillon Examiner* (13 October 1915).

"To Inspect Bridge." *Dillon Examiner* (3 March 1916).

"Work on Bridge Suspended." *Dillon Examiner* (21 January 1916).



Location of Browne's Bridge

Photograph 001. East portal and north profile. Browne's Bridge. View to the west.

Photograph 002. West portal. Browne's Bridge. View to the east.